

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Barenbrug Holland B.V.

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS IDENTIFIED CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

KENTUCKY BLUEGRASS

'Barbie'



In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, this 26th day of February in the year of our Lord one thousand nine hundred and eighty.

Attest:

General L. Lee
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

[Signature]
Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
 AGRICULTURAL MARKETING SERVICE
 LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

FORM APPROVED
 OMB NO. 40-R3822

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

INSTRUCTIONS: See Reverse.

1a. TEMPORARY DESIGNATION OF VARIETY BAR Pp 73-4		1b. VARIETY NAME BARMEZZO BARBIE JH 5/25/79		FOR OFFICIAL USE ONLY	
				PV NUMBER 7800071	
2. KIND NAME Kentucky Bluegrass		3. GENUS AND SPECIES NAME Poa pratensis		FILING DATE 5-16-78	TIME 10:00 A.M.
4. FAMILY NAME (BOTANICAL) Gramineae		5. DATE OF DETERMINATION 1975		FEE RECEIVED \$ 500.00	DATE 5-16-78
				\$ 250.00	1/28/80
6. NAME OF APPLICANT(S) Barenbrug Holland B.V.		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) Box 4 Arnhem, Netherlands		8. TELEPHONE AREA CODE AND NUMBER	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation			10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION Netherlands		11. DATE OF INCORPORATION
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: Francis Mayer Seed Company P.O. Box 72 Princeton, NJ 08540, U.S.A. MR. STAN ROLLIN 7/30/79					

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- 13B. Exhibit B, Novelty Statement.
- 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a). (If "Yes," answer 14B and 14C below.) YES NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? YES NO

14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED? FOUNDATION REGISTERED CERTIFIED ✓

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? YES NO (If "Yes," give name of countries and dates.)

first application for Plant Breeders Rights in the Netherlands in 1975

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? YES NO (If "Yes," give name of countries and dates.)

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? YES NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

Francis Mayer Seed Company, Inc.,
 representative of Barenbrug
 Holland B.V. (SIGNATURE OF APPLICANT)

(DATE)

(DATE)

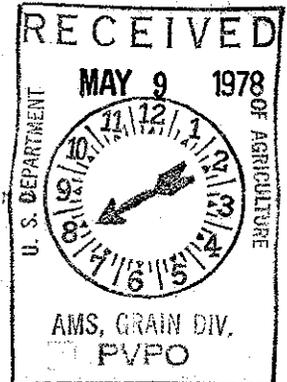
(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- 5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- 13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.
- 14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.



BARBIE J# 5/25/79

Application, BARMEZZO, Kentucky Bluegrass.

No. 7800071.

1 Plant of BARMEZZO was collected in the Netherlands in 1964. The plant was tested as a clone, together with hundreds of other plants in a turf trial. In 1968 a small seeded plot was established in a trial with fifty other selected plants. After 3 years of observation under close cutting BARMEZZO was with 12 other numbers selected for its good appearance under close mowing; and more for its fine leaf texture, colour, sod density and wear-resistance. A new trial with three replications was established in 1972 with the 12 selected potential varieties. In 1973 BARMEZZO was chosen for further propagation. A seed field was established from the clonal seed, harvested in 1971. In 1974 the pre-breederseed was harvested and the variety released in 1975. ~~In BARMEZZO occur no non-apomictic plants in the Netherlands. This may be different at other latitudes.~~ JJA 9/12/79

Specification of novelty.

The novelty of BARMEZZO Kentucky Bluegrass is based on the unique combination of the following characters:

- 1. leaf blade : no hairs
- 2. ligule : no hairs
- 3. base of leafsheath : no seed colour
- 4. Bent in Rachis : present
- 5. heading date : same as BARON
- 6. margin of leafsheath : with hairs
- 7. Panicle : red colored
- 8. resistance to Helminthosporium vagans : good
- 9. resistance to Puccinia poarum : moderate
- 10. resistance to Erisyphe graminis : good

BARMEZZO is different from all other bluegrasses under turf conditions in leaf texture, sod density, colour and disease resistance.

BARMEZZO most resembles FYLKING but differs by a red and longer panicle and a later heading date.

'Barbie' has been found to have no variants in four generations of reproduction and has been found to be stable during the same period.
per letter 11/16/79 JJA 11/21/79

Some additional information about BARMEZZO (BARBIE), Kentucky Bluegrass.

Application no. 7800071.

Objective description no. 4 : Plant height.

1. Data collected in may 1977, 10 plants/variety.

	<u>BARMEZZO</u>	<u>FYLKING</u>
	67 cm	53 cm
	74	47
	72	54
	65	49
	73	60
	70	60
	69	50
	74	54
	66	46
	<u>70</u>	<u>44</u>
mean	<u>70 cm</u>	<u>50 cm</u>

Analysis of variance.

Source	dif.	proj. ²	proj. ² /dim.	F	
Mean	1	72000	72000		
Varieties	1	2000	2000	68,9	P < 0.005
Error	18	348	29		
<hr/>					
Total	20	74348			

2. Date of ear emergence. Data collected in may 1977

	<u>BARMEZZO</u>	<u>FYLKING</u>
	13/5	8/5
	13	6
	12	7
	13	5
	14	7
	15	7
	16	8
	16	7
	14	6
	<u>14</u>	<u>9</u>
average	<u>14/5</u>	<u>7/5</u>



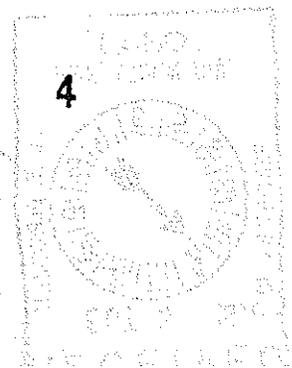
Analysis of variance.

Source	d.f.	proj. ²	proj. ² /dim.	F	
Mean	1	2205	2205		
Varieties	1	115	115	13.2	P < 0.005
Error	18	158	8.7		
<hr/>					
Total	20	2478			

L.S.D. = 2.777 (P=0.05)

The differences between the two varieties are highly significant.

The panicle of BARMEZZO is red coloured and the panicle of FYLKING is not red coloured.



FORM GR-470-18
(1-15-73)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C
(Bluegrass)

OBJECTIVE DESCRIPTION OF VARIETY
BLUEGRASS (POA SPP.)

NAME OF APPLICANT(S) Barenbrug Holland B.V.	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) Postbox 4, Arnhem Netherlands	PVPO NUMBER 7800071 VARIETY NAME OR TEMPORARY DESIGNATION BARMEZZO BARBIE JH 5/25/79

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. or) when number is either 99 or less or 9 or less.

1. KIND:

1 = POA COMPRESSA 2 = P. PRATENSIS 3 = P. TRIVIALIS 4 = OTHER (Specify)

2. REGION OF BEST ADAPTATION:

1 = NORTHEAST 2 = TRANSITIONAL ZONE 3 = NORTH CENTRAL 4 = PACIFIC N.W. 5 = OTHER (Specify) **Western Europe**

3. MATURITY (At First Anthesis):

1 = EARLY (Delta) 2 = MEDIUM EARLY (Fylking) 3 = MEDIUM (Newport) 4 = LATE (Merion)

<input type="text" value="0"/> <input type="text" value="0"/>	NUMBER OF DAYS EARLIER THAN	<input type="text" value="6"/>	} 1 = NUGGET 2 = FYLKING 3 = DELTA 4 = MERION 5 = NEWPORT 6 = BARON
<input type="text" value="0"/> <input type="text" value="7"/>	NUMBER OF DAYS LATER THAN	<input type="text" value="2"/>	

4. PLANT HEIGHT (Longest Shoot from Soil Surface to Top of Head):

<input type="text" value="0"/> <input type="text" value="7"/> <input type="text" value="0"/>	CM. HEIGHT	} 1 = NUGGET 2 = FYLKING 3 = DELTA 4 = MERION 5 = NEWPORT 6 = BARON
<input type="text" value=""/> <input type="text" value=""/>	CM. SHORTER THAN	
<input type="text" value="2"/> <input type="text" value="0"/>	CM. TALLER THAN	

5. HABIT:

1 = PROSTRATE (Fylking) 2 = SEMI-PROSTRATE (Marion)
3 = ERECT (Delta)

6. VEGETATIVE REPRODUCTION (1 = Absent; 2 = Present):

RHIZOMES STOLONS

7. LEAF BLADE:

Color: 1 = LIGHT GREEN (Rough Bluegrass) 2 = BLUE GREEN (Canada Bluegrass) 3 = MODERATELY DARK GREEN (Merion)
4 = DARK GREEN (Adelphi) 5 = OTHER (Specify)

Upper Surface: 1 = SHINY 2 = DULL Lower Surface: 1 = SHINY 2 = DULL

MM. WIDTH as Fylking MM. LENGTH

8. LEAF SHEATH (Base):

Seedling Color: 1 = GREEN 2 = RED MM. LENGTH Keel: 1 = NOT KEELED 2 = KEELED

Surface:

1 = GLABROUS 2 = PUBESCENT 1 = SMOOTH 2 = ROUGH 1 = NON-GLAUCOUS 2 = GLAUCOUS

9. LEAFINESS (At First Anthesis):

Number of leaves per tiller or shoot: 1 = FEW (1 - 3) 2 = INTERMEDIATE (4 - 6) 3 = MANY (More than 6)

10. PANICLE:

<input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/>	MM. LENGTH	} 1 = NUGGET 2 = FYLKING 3 = DELTA 4 = MERION 5 = NEWPORT 6 = BARON
<input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/>	MM. LONGER THAN	
<input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/>	MM. SHORTER THAN	

10. PANICLE (Cont.):

NUMBER OF PANICLES PER PLANT

MILLIGRAMS SEED PER PANICLE

Branches LOWEST WHORL: 1 = DROOPING (Prato) 2 = HORIZONTAL (Merion) 3 = OTHER (Specify)

Panicle Habit: 1 = NODDING (Newport) 2 = UPRIGHT (Nugget)

MM. SPIKELET LENGTH

11. LEMMA

KEEL

LATERAL NERVES

1 = GLABROUS 2 = SLIGHTLY PUBESCENT 3 = PUBESCENT 4 = OTHER (Specify)

Intermediate Nerves: 1 = DISTINCT 2 = OBSCURE

Basal Webbing: 1 = NONE 2 = SCANT 3 = COPIOUS

12. SEED: 1)

Apomictin Percentage: 1 = MORE THAN 95 2 = 85 TO 95 3 = LESS THAN 85

Phenol Reaction: 1 = NONE - LEMMA REMOVED (Merion) 2 = BEIGE (Cougar) 3 = BROWN (Windsor)
4 = BLACK (Delta - 2 hours) 5 = BLACK (Anheuser - 24 hours)

MM. WIDTH

MM. LENGTH

GRAMS PER
10,000 SEEDS

CHROMOSOME NO. (2n)

13. TURF DENSITY MAINTENANCE AT ONE INCH CUT:

1 = POOR 2 = MODERATE (Merion) 3 = SUPERIOR (Nugget) 4 = EXCELLENT

14. VERTICAL GROWTH RATE:

1 = SLOW (Nugget) 2 = MEDIUM (Merion) 3 = FAST (Delta) 4 = OTHER (Specify relation to a standard)

15. SPRING GREEN UP:

1 = EARLY (Windsor) 2 = MEDIUM (Fylking) 3 = LATE (Nugget)

16. FALL DORMANCY: (1 = Not Dormant; 2 = Intermediate; 3 = Dormant)

NORTHERN ($42^{\circ} 30' \pm 30'$ Lat.)INTERMEDIATE ($40^{\circ} \pm 30'$ Lat.)SOUTHERN ($37^{\circ} 30' \pm 30'$ Lat.)

17. SEEDLING VIGOR (Growth Rate):

Seedling: 1 = SLOW 2 = MEDIUM 3 = FAST

18. ENVIRONMENTAL RESISTANCE: (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

COOL TEMPERATURE
(Winter color)

COLD (Injury)

HEAT

DROUGHT

SHADE

POOR FERTILITY

ACID SOIL

ALKALINITY

SALINITY

SOIL COMPACTION

POOR DRAINAGE

AIR POLLUTION

OTHER (Specify)

19. DISEASE, INSECTS, AND NEMATODE RESISTANCE: (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

HELMINTHOSPORIUM
VAGANS

H. SOROKINIANUM

H. DICTYOIDES

RHIZOCTONIA SOLANI

ERYSIPHE GRAMINIS

USTILAGO STRIIFORMIS

FUSARIUM NIVALE

F. ROSEUM

TYPHULA IOTANA

SCLEROTINIA
HOMEOCARPA

PUCCINIA GRAMINIA

P. STRIIFORMIS

PYTHIUM ULTIMATUM

CRAMBUS
BONIFATELLUS

OTHER (Specify)

REFERENCE

Nickerson's or any recognized color fan may be used to determine plant colors of the described variety.

1) Caryopsis at the base is black, nervae are somewhat coloured, darkest at the base.